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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,577	01/29/2002	John Alex Leonard	EPE 2 0012	7926

7590 04/23/2003

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EXAMINER

MENON, KRISHNAN S

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 04/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/059,577

Applicant(s)

LEONARD ET AL.

Examiner

Krishnan S Menon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 16-25, 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 26, 27, 30 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claim 1-15, 26, 27, 30 and 31 drawn to method of producing iodine solution, classified in class 210, subclass 650.
- II. Claims 16-25, drawn to device, classified in class 426, subclass 77.
- III. Claim 28 and 29, drawn to food preservation, classified in class 426, subclass 524.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another materially different process like releasing drugs, herbicides, etc in water.

Inventions I and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated because they have different modes of operation and different functions.

Inventions II and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus could be

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used for other materially different process like releasing drugs in water. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Sandra Koenig, applicant's attorney, on 4/17/03 a provisional election was made without traverse to prosecute the invention of group I, claims 1-15, 26, 27, 30 and 31. Affirmation of this election must be made by applicant in replying to this Office action. Claims 16-25, 28 and 29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Double Patenting

Applicant is advised that should claim 26 be found allowable, claim 27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Claim 26 and 27 recite substantially the same matter of preparing a fluid for dietary purposes. Disinfecting, sterilizing, preserving, food ingredients, foodstuffs, feed ingredients, and feedstuff are just repetitive words not adding any further limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,7,9,10,13,26,27,30 and 31 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by O'dowd (US 5,275,736).

O'Dowd teaches a method of producing aqueous solution of thermodynamically free iodine from iodine vapor transferred across a membrane from an iodine source having a membrane permeable to iodine vapor enclosing the source of iodine vapor, and providing a vessel which contains the receiving medium for iodine permeated across the membrane (see figures, col 3 lines 28-47, col 4 line 43- col 5 line 21) as in claims 1. The iodine source is a liquid or solid as in claim 2 (col 2 lines 3-14). The iodine vapor is absorbed by the liquid contained in the vessel as in claim 3, where in the receiving medium is static (col 4 line 66-col 5 line 21). The method comprises passing iodine vapor from the source to a gas as in claim 4 and then to the liquid medium(col 6 line 67 – col 7 line 11). The membrane is a plastic as in claim 5, single ply as in claim 7, continuous film as in claim 9, non-woven as in claim 10, non-permeable to solid iodine as in claim 13 (col 6 lines 33-47).

Independent Claims 26 and 27 add the further limitations to claim 1 of controlling flow of iodine receiving medium in a batch or continuous process (taught by O'Dowd in col 5 line 41 – col 6 line 7: batch process), and preparing the iodine fluid for dietary purposes, which O'Dowd teaches in col 1 lines 40-50).

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Independent Claim 30 is broader than claim 1 having halogen in place of iodine, and claim 31 depends from claim 30. O'Dowd teaches all the limitations of claims 30 and 31 as in claims 1 and 3 above. Iodine is a halogen.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dowd (736).

O'Dowd teaches all the limitations of claim 1. Claim 15 adds further limitations of vessel being substantially impermeable to iodine vapor (col 4 lines 43-46); maintaining temperature between -10 and 110 deg F, Vacuum to 5 atm pressure, and constructing and testing the vessel for the pressure rating. O'Dowd teaches vacuum (col 7 lines 3-6), but is silent on the temperature and the vessel testing. However, it would be obvious to one of ordinary skill in the art that the temperature of O'Dowd's process is the ambient temperature, which falls in the range of -10 to 110

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F, and that one would construct and test the vessels for its operating conditions for safety per code requirements.

2. Claims 6, 8, 11,12 and14 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dowd (736) in view of Koch (US 4,483,771).

O'Dowd teaches all the limitations of claim 1. Instant claims add further limitations, which O'Dowd does not teach, but Koch teaches, as follows: the iodine permeable membrane is inorganic (claim 6) (col 3 lines 10-15), is multi-ply with same or different structure (claim 8) (col 3 lines 39-45), has nano-structure (claim 11) (col 2 lines 43-46), perforated (claim 12) (col 2 lines 35-55), and transferring iodine vapors through pores less than 5 microns (claim 14) (col 2 lines 39-45). It would be obvious to one of ordinary skill in the art to use the teachings of Koch in the teachings of O'Dowd for such applications as described by Koch col 3 lines 43-56 and for strength and safety (Koch – col 1 lines 59-66).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S Menon whose telephone number is 703-305-5999. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Krishnan Menon
Patent Examiner
April 21, 2003


JOSEPH DRODGE
PRIMARY EXAMINER